




JPW 1636

Patent Docket P1746R1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Vanessa Chisholm et al. Serial No.: 10/019,586 Filed: December 20, 2001 For: EXPRESSION VECTORS AND METHODS	Group Art Unit: 1636 Examiner: Ramin Akhavan Confirmation No: 1705 CUSTOMER NO: 09157 CERTIFICATE OF MAILING I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 13, 2004  Tom Marrs
---	--

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants submit herewith patents, publications or other information (attached hereto and listed on the attached revised Form PTO-1449) of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR §1.56.

This Information Disclosure Statement is filed in accordance with the provisions of:

- ☐ **37 CFR §1.97(b)**
- within three months of the filing date of the application other than a continued prosecution application under 37 CFR §1.53(d); **or**
 - within three months of the date of entry of the national stage of a PCT application as set forth in 37 CFR §1.491, **or**
 - before the mailing of the first Office action on the merits; **or**
 - before the mailing of the first Office action after the filing of a request for a continued examination under 37 CFR §1.114.
- ☒ **37 CFR §1.97(c)**
- by the applicant after the period specified in 37 CFR §1.97(b), but prior to the mailing date of any of a final action under 37 CFR §1.113, or a notice of

allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application, and is accompanied by either the fee set forth in 37 CFR §1.17(p) **or** a statement as specified in 37 CFR §1.97(e), as checked below.

☐ **37 CFR §1.97(d)**

- after the period specified in 37 CFR §1.97(c), and is accompanied by the fee set forth in 37 CFR §1.17(p) **and** a statement as specified in 37 CFR §1.97(e), as checked below.

[If either of boxes 37 CFR §1.97(c) or 37 CFR §1.97(d) is checked above, the following statement under 37 CFR §1.97(e) may need to be completed.]

- ☐ **37 CFR §1.97(e)** Each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- ☐ **37 CFR §1.704(d)** Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and the communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of this information disclosure statement. Therefore, in accordance with the provisions of 37 CFR §1.704(d), the filing of this information disclosure statement will not be considered a failure to engage in reasonable efforts to conclude prosecution under 37 CFR §1.704.
- ☒ The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 07-0630 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement under 37 CFR §1.17(p). Any deficiency or overpayment should be charged or credited to this deposit account.

A list of the patent(s) and/or publication(s) is set forth on the attached revised Form PTO-1449 (Modified).

A copy of the items on PTO-1449 is supplied herewith.

A concise explanation of relevance of the items listed on PTO-1449 is:

☒ not given

☐ given for each listed item

☐ given for only non-English language listed item(s) [Required]

Serial No.: 10/019,586
Filing Date: December 20, 2001

Page 3

- [] in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

In accordance with 37 CFR § 1.97(g), the filing of this information disclosure statement shall not be construed as a representation that a search has been made.

In accordance with 37 CFR § 1.97(h), the filing of this information disclosure statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 CFR § 1.56(b).

The Commissioner is hereby authorized to charge any additional fees required under 37 CFR 1.16 and 1.17 for this Information Disclosure Statement, or credit overpayment to Deposit Account No. 07-0630. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

GENENTECH, INC.

Date: May ¹³____, 2004

By: _____

Alex Andrus, Ph.D., J.D.

Reg. No. 44,509

Telephone No. (650) 467-4255



FORM PTO-1449

U.S. Dept. of Commerce
Patent and Trademark Office

Atty Docket No.

P1746R1

Serial No.

10/019,586

LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Applicant

Vanessa Chisholm et al.

Filing Date

20 Dec 2001

Group

1636

U.S. PATENT DOCUMENTS

Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
	1	4,399,216	16.08.83	Axel et al.			
	2	4,634,665	06.01.87	Axel et al.			
	3	4,713,339	15.12.87	Levinson et al.			
	4	5,491,084	13.02.96	Chalfie et al.			
	5	5,561,053	01.10.96	Crowley			
	6	5,625,048	29.04.97	Tsien et al.			
	7	5,777,079	07.07.98	Tsien et al.			
	8	5,795,737	18.08.98	Seed et al.			
	9	5,804,387	08.09.98	Cormack et al.			
	10	5,874,304	23.02.99	Zolotukhin et al.			

FOREIGN PATENT DOCUMENTS

Examiner Initials		Document Number	Date	Country	Class	Subclass	Translation Yes	No
	11	WO 92/08796	29.05.92	PCT				
	12	WO 94/28143	08.12.94	PCT				
	13	WO 95/21191	10.08.95	PCT				
	14	WO 97/42320	13.11.97	PCT				
	15	WO 98/06737	19.02.98	PCT				
	16	WO 98/21355	22.05.98	PCT				

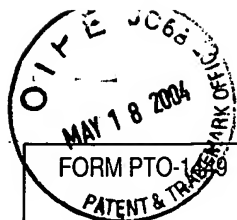
OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

	17	Assaraf et al., "Identification of Methotrexate Transport Deficiency in Mammalian Cells Using Fluoresceinated Methotrexate and Flow Cytometry" <u>Proc. Natl. Acad. Sci. USA</u> 84:7154-7158 (Oct 1987)
	18	Chalfie et al., "Green Fluorescent Protein as a Marker for Gene Expression" <u>Science</u> 263:802-805 (1994)
	19	Cramer et al., "Improved Green Fluorescent Protein by Molecular Evolution Using DNA Shuffling" <u>Nature Biotechnology</u> 14:315-319 (1996)
	20	Cubitt et al., "Understanding, improving and using green fluorescent proteins" <u>Trends Biochem. Sci.</u> 20:448-455 (1995)
	21	Davies et al., "The Sequence Context of the Initiation Codon in the Encephalomyocarditis Virus Leader Modulates Efficiency of Internal Translation Initiation" <u>Journal of Virology</u> 66:1924-1932 (1992)
	22	Gubin et al., "Long-Term, Stable Expression of Green Fluorescent Protein in Mammalian Cells" <u>Biochem. Biophysics. Res. Commun.</u> 236:347-350 (1997)
	23	Haber et al., "Properties of an Altered Dihydrofolate Reductase Encoded by Amplified Genes in Cultured Mouse Fibroblasts" <u>Journal of Biological Chemistry</u> 256(18):9501-9510 (1981)
	24	Heim et al., "Improved green fluorescence" <u>Nature</u> 373:663-664 (1995)
	25	Herlitschka et al., "Overexpression of Human Prothrombin in Permanent Cell Lines Using a Dominant Selection/ Amplification Fusion Marker" <u>Protein Expression and Purification</u> 8:358-364 (1996)

Examiner

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

U.S. Dept. of Commerce
Patent and Trademark Office

Atty Docket No.

P1746R1

Serial No.

10/019,586

LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Applicant

Vanessa Chisholm et al.

Filing Date

20 Dec 2001

Group

1636

OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

26	Hung et al., "Molecular cloning of the neu gene: Absence of gross structural alteration in oncogenic alleles" <u>Proc. Natl. Acad. Sci. USA</u> 83:261-264 (1986)
27	Jang et al., "Initiation of Protein Synthesis by Internal Entry of Ribosomes into the 5' Nontranslated Region of Encephalomyocarditis Virus RNA In Vivo" <u>Journal of Virology</u> 63(4):1651-1660 (1989)
28	Johnston and Kucey, "Competitive Inhibition of hsp70 Gene Expression Causes Thermosensitivity" <u>Science</u> 242:1551-1554 (1988)
29	Kaetzel and Nilson, "Methotrexate-induced Amplification of the Bovine Lutropin Genes in Chinese Hamster Ovary Cells" <u>Journal of Biological Chemistry</u> 263(13):6344-6351 (1988)
30	Kaufman and Schimke, "Amplification and Loss of Dihydrofolate Reductase Genes in a Chinese Hamster Ovary Cell Line" <u>Molecular & Cellular Biology</u> 1(12):1069-1076 (1981)
31	Kaufman and Sharp, "Amplification and Expression of Sequences Cotransfected with a Modular Dihydrofolate Reductase Complementary DNA Gene" <u>J. Mol. Biol.</u> 159:601-621 (1982)
32	Kaufman et al., "Coamplification and Coexpression of Human Tissue-Type Plasminogen Activator and Murine Dihydrofolate Reductase Sequences in Chinese Hamster Ovary Cells" <u>Molecular & Cellular Biology</u> 5(7):1750-1759 (1985)
33	Kaufman et al., "Improved vectors for stable expression of foreign genes in mammalian cells by use of the untranslated leader sequence from EMC virus" <u>Nucleic Acids Research</u> 19(16):4485-4490 (1991)
34	Kaufman et al., "Translational Efficiency of Polycistronic mRNAs and Their Utilization to Express Heterologous Genes in Mammalian Cells" <u>EMBO Journal</u> 6(1):187-193 (1987)
35	Kaufman, "High Level Production of Proteins in Mammalian Cells" <u>Genetic Engineering</u> , New York and London:Plenum Press Vol. 9:155-198 (1987)
36	Kaufman, "Selection and Coamplification of Heterologous Genes in Mammalian Cells" <u>Methods in Enzymology</u> 185:537-566 (1990)
37	Levenson et al., "Internal Ribosomal Entry Site-Containing Retroviral Vectors with Green Fluorescent Protein and Drug Resistance Markers" <u>Human Gene Therapy</u> 9:1233-1236 (1998)
38	Marshall et al., "The Jellyfish Green Fluorescent Protein: A New Tool for Studying Ion Channel Expression and Function" <u>Neuron</u> 14:211-215 (1995)
39	Natarajan et al., "Comparison of mutant forms of the green fluorescent protein as expression markers in Chinese hamster ovary (CHO) and Saccharomyces cerevisiae cells" <u>J. Biotechnol.</u> 62:29-45 (1998)
40	Nolan et al., "Fluorescence-activated cell analysis and sorting of viable mammalian cells based on B-D-galactosidase activity after transduction of Escherichia coli lacZ" <u>Proc. Natl. Acad. Sci. USA</u> 85:2603-2607 (1988)
41	Olson et al., "Analysis of MAP4 Function in Living Cells Using Green Fluorescent Protein (GFP) Chimeras" <u>Journal of Cell Biology</u> 130:639-650 (1995)
42	Page et al., "High Level Expression of the Humanized Monoclonal Antibody Campath-1H in Chinese Hamster Ovary Cells" <u>Bio/Technology</u> 9:64-68 (1991)
43	Pelletier et al., "Internal initiation of translation of eukaryotic mRNA directed by a sequence derived from poliovirus RNA" <u>Nature</u> 334:320-325 (1988)
44	Prasher et al., "Primary structure of the Aequorea victoria green-fluorescent protein" <u>Gene</u> 111:229-233 (1992)
45	Ringold et al., "Co-expression and Amplification of Dihydrofolate Reductase cDNA and the Escherichia coli XGPRT Gene in Chinese Hamster Ovary Cells" <u>Journal of Molecular & Applied Genetics</u> 1(3):165-175 (1981)

Examiner

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Sheet 3 of 3

U.S. Dept. of Commerce
Patent and Trademark Office

P1746R1

10/019,586

LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Vanessa Chisholm et al.

20 Dec 2001

1636

OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

[illegible]

Examiner

Date Considered

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.